IN THE UNITED STATES DISTRCIT COURT FOR THE SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

NATIONAL OILWELL VARCO, L.P.,	§	
	§	
Plaintiffs,	§	
	§	Civil Action No. 4:17cv2767
v.	§	
	§	JURY
SMART REAMER DRILLING SYSTEMS	§	
LIMITED, and	§	
WAJID RASHEED,	§	
	§	
Defendants.	§	

DECLARATORY JUDGMENT COMPLAINT

Plaintiff National Oilwell Varco, L.P., by and through its attorneys, for its Declaratory Judgment Complaint, alleges as follows:

PARTIES

- 1. Plaintiff National Oilwell Varco, L.P. ("NOV") is a Delaware limited partnership having its principal place of business in Houston, Texas.
- 2. Defendant Smart Reamer Drilling Systems Limited ("Smart Reamer") is a private limited company incorporated and registered in England and Wales with its registered office address at 268 Bath Road, Slough, Berkshire, SL1 4DX, United Kingdom.
- 3. Defendant Wajid Rasheed, an individual, is a resident of the United Kingdom with an address of 7 Benson Close, Slough, SL2 5EH, United Kingdom.

JURISDICTION AND VENUE

4. This is a complaint for declaratory relief under the Patent Laws of the United States, 35 U.S.C. §§ 1, et seq., and the United States Defend Trade Secrets Act, 18 U.S.C.

§§ 1831, et seq. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331, 1338(a), and 2201, et seq. This Court has personal jurisdiction over Smart Reamer at least because Smart Reamer maintains its vice president in Houston, Texas, and that vice president has authority to enter into legal agreements on behalf of Smart Reamer; solicited meetings with NOV and NOV personnel in Houston, Texas, where such meetings form at least part of the basis of this dispute; has accused NOV of misappropriation of trade secrets as a result of acts that are alleged to have occurred in Houston, Texas; on information and belief has solicited business relationships with third parties in Houston, Texas; and has at least a substantial portion of the Smart Reamer products that are at issue in this dispute designed and manufactured by a third-party contractor located in Houston, Texas. This Court has personal jurisdiction over Mr. Rasheed at least because he is, upon information and belief, owner of Smart Reamer and as CEO and founder of Smart Reamer has directed business contacts and relationships, including those listed in this paragraph, to Houston, Texas.

5. Venue is proper in this district pursuant to 28 U.S.C. § 1391.

FACTUAL BACKGROUND

A. Smart Reamer, Its Employees, and Its Activities

- 6. Smart Reamer describes itself as a "micro-company with three employees" that was established in the United Kingdom in 2009. (Draft Writ of Summons to Oslo City Court by Smart Reamer Drilling Systems Limited ("Norway Writ") (Ex. A), at 3.1.1.)
- 7. Smart Reamer claims to have invented and developed its SmartReamer Tool, a tool used to perform "underreaming" operations in the context of oil and gas drilling operations. (Norway Writ.) According to Smart Reamer, "underreaming" refers to "the process of enlarging a wellbore past its originally drilled size." (Norway Writ, at 3.2.) According to Smart Reamer, its

SmartReamer Tool is covered by a number of United States patents that are related to a number of United Kingdom and European patents. Smart Reamer alleges that these patents cover an invention that "is a tool and method for integrated underreaming, in which underreaming occurs with simultaneous measurements." (Norway Writ, at 3.2.)

- 8. According to its web page, Smart Reamer has associated with it the following personnel: Wajid Rasheed, CEO and Founder; Dr. John L. Thorogood, Non-Executive Director; Jaime Barnardini, Vice President of Smart Reamer for the Americas; and Dr. Mark Volanthen, Non-Executive Director. (http://smartreamer.com/?page_id=289 (Ex. B).)
 - 9. Mr. Rasheed is a resident of the United Kingdom.
- 10. Upon information and belief, Dr. Volanthen is a resident of the United Kingdom. In addition to his responsibilities as a Non-Executive Director for Smart Reamer, Dr. Volanthen is an Investment Director for Mercia Technologies PLC, Chairman of Oxifree Global Limited, Non-Executive Director for Rawwater Engineering Company Limited, Advisory Board Member for Synaptec Ltd., and Advisory Board Member for Spectrum Corporate Finance LLP. (LinkedIn Profile for Dr. Mark Volanthen (Ex. C).)
- 11. Upon information and belief, Dr. Thorogood is a resident of the United Kingdom. In addition to his responsibilities as a non-executive director of Smart Reamer, Dr. Thorogood is an independent consultant. (http://www.drlgc.com/index.htm (Ex. D).)
- 12. Mr. Barnardini is a resident of Houston, Texas. Mr. Barnardini's LinkedIn profile lists him as located in the "Houston, Texas Area." (LinkedIn Profile for Jaime Barnardini (Ex. E).) According to Harris County Appraisal District on-line records at www.hcad.org, Mr. Barnardini owns two residential properties in Houston, Texas: at 5626 Del Monte Drive, Houston, Texas 77056-4010 (Ex. F); and at 2204 Nantucket Drive, Houston, Texas 77057 (Ex.

- G). Upon information and belief, Mr. Barnardini's residence is located at 5626 Del Monte Drive, Houston, Texas 77056-4010 and he conducts business as Vice President for Smart Reamer from that address. Mr. Barnardini has authority to bind Smart Reamer in legal agreements. (Norway Writ Annex 11 (Ex. H) at 10.)
- 13. Smart Reamer claims to have completed its first qualification tests for its Smart Reamer tool in 2010, and in 2011 developed its first tool through joint development agreements with other entities. Smart Reamer further claims to have conducted drilling verification tests of its Smart Reamer tool in 2012 in Norway, and conducted other field tests of its tool in 2013.
- 14. Smart Reamer alleges that, by 2014, it was awarded a three well section contract for its Smart Reamer Tool to operate in the Gulf of Mexico.
- 15. Smart Reamer's product supply chain runs through Houston, Texas. The circuit boards used in its products, including the SmartReamer Tool, are, on information and belief, designed, manufactured, and tested by a Texas corporation with a place of business in Houston, Texas. The allegations in this paragraph have evidentiary support and will likely have addition evidentiary support after a reasonable opportunity for investigation.

B. Smart Reamer's Patents

- 16. According to Smart Reamer, all Smart Reamer patents, which Smart Reamer alleges to cover its SmartReamer Tool, "claim priority of disclosure to 2008 GB 0811815.0" patent application. The GB0811815.0 patent application was filed by Wajid Rasheed on June 27, 2008, and was granted on April 7, 2010 as UK patent GB2460096B. (Annex to UK Particulars of Claim (Ex. I), at 8.)
- 17. On February 15, 2010, Mr. Rasheed filed two divisional applications from the GB0811815.0 application: GB1002533.6, which was granted on November 3, 2011 as UK patent

GB2465504B; and GB1002534.4, which was granted on December 8, 2010 as UK patent GB2465505B.

- 18. According to Smart Reamer, the European patent EP 2 327 857 that was granted on March 19, 2014, is the European equivalent to UK patent GB2460096B. (Norway Writ, at 3.2.) Again, according to Smart Reamer, European patent EP 2 327 857 was validated in Norway as patent NO/EP2327857 on July 14, 2014. (Norway Writ, at 3.2.)
- 19. Smart Reamer alleges that Mr. Rasheed assigned UK patents GB246006B, GB2465504B, and GB2465505B and European patent EP 2 327 857, and "all rights associated therewith" to Smart Reamer on November 11, 2015. (Norway Writ, at 3.2; Annex to UK Particulars of Claim, at 1, 8.)
- 20. Smart Reamer claims that "[p]atents based on the same invention with broader claim scope have also been obtained in several other jurisdictions." (Norway Writ, at 3.2.) Some of the other patents that claim priority to the UK patent application GB0811815.0 are the following United States Patents:
 - a. The United States Patent and Trademark Office (the "PTO") issued U.S. Patent No. 8,235,144 (the "'144 Patent"), titled "EXPANSION AND SENSING TOOL," on August 7, 2012. A true and correct copy of the '144 Patent is attached as Exhibit J. The '144 Patent, on its face, claims priority to UK patent application GB0811815.0.
 - b. The PTO issued U.S. Patent No. 8,511,404 (the "'404 Patent'), titled "DRILLING TOOL, APPARATUS AND METHOD FOR UNDERREAMING AND SIMULTANEOUSLY MONITORING AND CONTROLLING WELLBORE DIAMETER," on August 20, 2013. A true and correct copy of the '404 Patent is attached

as Exhibit K. The '404 Patent, on its face, claims priority to UK patent application GB0811815.0.

- c. The PTO issued U.S. Patent No. 8,528,668 (the "'668 Patent), titled "ELECTRONICALLY ACTIVATED UNDERREAMER AND CALLIPER TOOL," on September 10, 2013. A true and correct copy of the '404 Patent is attached as Exhibit L. The '668 Patent, on its face, claims priority to UK patent application GB0811815.0.
- d. The PTO issued U.S. Patent No. 9,447,676 (the "'676 Patent"), titled ELECTRONCIALLY ACTIVATED UNDERREAMER AND CALLIPER TOOL," on September 20, 2016. A true and correct copy of the '676 Patent is attached as Exhibit M. The '676 Patent, on its face, claims priority to UK patent application GB0811815.0.
- e. The PTO issued U.S. Patent No. 9,593,538 (the "'538 Patent"), titled "CIRCUMFERENTIAL AND LONGITUDINAL CUTTER COVERAGE IN CONTINUATION OF A FIRST BIT DIAMETER TO A SECOND EXPANDABLE REAMER DIAMETER," on March 14, 2017. A true and correct copy of the '538 Patent is attached as Exhibit N. The '538 Patent, on its face, claims priority to UK patent application GB0811815.0.
- f. The PTO issued U.S. Patent No. 9,677,342 (the "'342 Patent"), titled "DRILLING TOOL, APPARATUS AND METHOD FOR UNDERREAMING AND SIMULTANEOUSLY MONITORING AND CONTROLLING WELLBORE DIAMETER," on June 13, 2017 from U.S. Patent Application No. 13/945,719, filed on July 18, 2013. A true and correct copy of the '342 Patent is attached as Exhibit O. The '342 Patent claims priority to UK patent application GB0811815.0.

21. Wajid Rasheed is listed on the face of the '144 Patent, the '404 Patent, the '668 Patent, the '676 Patent, the '538 Patent, and the '342 Patent (collectively, the "Patents-in-Suit") as the sole inventor and assignee. No information has been recorded with the PTO to indicate that Mr. Rasheed has assigned the rights of the Patents-in-Suit to Smart Reamer.

C. Smart Reamer Initiates Contact with NOV

- 22. Prior to the Fall of 2014, Smart Reamer engaged Simmons & Company International as its financial advisors. (Norway Writ, at 3.5.) At that time, Simmons & Company International was an independent investment bank headquartered in Houston, Texas, specializing in the energy industry and offering merger and acquisition advisory services. (http://www.piperjaffray.com/2col.aspx?id=3706 (Ex. P).) Subsequently, in 2016, Simmons & Company International was acquired by Piper Jaffray Companies. (*Id.*)
- Don October 28, 2014, Renju Jose, an NOV Director of Corporate Development based in Houston, Texas, was contacted via telephone by Tom McCann, an Associate with Simmons & Company International, based in London, UK. (Email dated Oct. 29, 2014, 6:43 AM (Ex. Q).) Mr. McCann follow-up on that call on October 29, 2011, with an email to Mr. Jose. (Id.) In his email, Mr. McCann stated: "Thank you for your time yesterday and apologies for the slight delay in sending this information. Attached please find an introduction document to Smart Reamer and the SPE paper mentioned. Also, as requested, the list of patents is as follows." (Id.) Mr. McCann listed the following patents and published patent applications, among others: the '668 Patent; the '404 Patent; the '144 Patent; U.S. Patent Application No. 13/945,719 (which ultimately issued as the '676 Patent); U.S. Patent Application No. 13/909,413 (which ultimately issued as the '676 Patent); U.S. Patent Application No. 14/295,717 (which ultimately issued as the '538 Patent); European Patent No. EP 2 327 857; UK Patent No. GB2465504B, and UK

Patent No. GB2465505B. (*Id.*) Mr. McCann concluded his email with: "I would be grateful if you could let us know as soon as possible if there is an interest in looking at this further and in the meantime please do not hesitate to call me if you have any further questions." (*Id.*)

- 24. In his October 29, 2014 email to Mr. Jose, Mr. McCann attached a two-page PDF document entitled "Introduction To Smart Wellbore Systems." Smart Reamer has erroneously characterized this two-page document as a "PowerPoint presentation." (Norway Writ, at 3.5.) The document included six sections: "Company Overview;" Company History;" Smart Wellbore System's Core Technology;" "Smart Wellbore Systems Family Of Tools And Applications" summarizing information that was disclosed in public patent filings; "Compelling Market Themes For Smart Wellbore Systems;" and "Estimated Smart Wellbore Systems Market Potential" reporting information collected by third-party Spears and Associates. (*Id.*)
- 25. In his October 29, 2014 email to Mr. Jose, Mr. McCann also attached the following publicly-available publication: Rasheed, Wajid, Shaohua Zhou and Nasser M. Al-Khanferi, "Smart Calliper for Measurement While Drilling," SPE/IADC 166786, SPE/IADC Middle East Drilling Technology Conference and Exhibition, Dubai, UAE, 7–9 Oct. 2013. This publically-available publication is the source of much of the information provided in the Smart Reamer "Introduction To Smart Wellbore Systems" that Mr. McCann provided to Mr. Jose. (*Id.*)
- 26. Mr. McCann's email to Mr. Jose dated October 29, 2014 mentioned nothing about confidentiality, nor did Mr. McCann attach or propose entry into a non-disclosure agreement ("NDA"). (*Id.*)
- 27. Mr. Jose responded to Mr. McCann on November 3, 2014 via email sent at 12:18 PM CT. (Email dated Nov. 3, 2014, 12:18 PM (Ex. R).) His response made clear that there was no confidentiality agreement or understanding in place between or among NOV, Smart

Reamer, and Simmons & Company International. Mr. Jose wrote: "I have share this with a very small group. Can a conversation be arranged (pre-NDA) with our VP of Engineering for Downhole (Russ Gilleylen) and Wajid. Russ wants to understand their direction a bit more before we proceed." (*Id.*)

- 28. Mr. McCann's response to Mr. Jose two days later made clear that Smart Reamer understood that the information already provided was not subject to an NDA, and that NOV desired to obtain some general, non-confidential information before proceeding with any detailed discussions with Smart Reamer. Mr. McCann wrote: "Thanks for getting back to me. I spoke to Wajid yesterday evening and he is considering the request. I will get back to you once I hear from him, but in the meantime it would be helpful if you could provide us with a list of questions/discussion topics Russ would like to cover in the conversation." (Email dated Nov. 5, 2014, 4:07 AM (Ex. S).)
- 29. On November 12, 2014, Mr. Jose responded to Mr. McCann that he was "[I]ooking for a very short call," where he would like to discuss two topics: "1. Basic background on where development stands, how far from commercialization, what needs to be done for commercialization;" and "2. Does the sale include the caliper tool shown on the SmartReamer website." (Email dated Nov. 12, 2014, 2:43 PM (Ex. T).) The contemplated call never occurred.
- 30. Mr. McCann followed-up with NOV via email on December 12, 2014, to try to schedule a call between NOV and Smart Reamer in December 2014, or January 2015. That call was never scheduled.
 - 31. Ultimately, a meeting and videoconference call was scheduled for April 14, 2015.

- 32. Smart Reamer did not send a draft NDA to NOV for consideration until April 10, 2015. NOV reviewed the proposed NDA, but contemporaneous internal NOV email communications indicate that NOV understood that no NDA would be necessary in advance of the scheduled April 14, 2015 meeting because a condition that NOV placed on that meeting was that no non-public information was to be shared with NOV by Smart Reamer. These contemporaneous communications memorialize that Mr. Rasheed was aware of, and agreed with, this condition.
- 33. The draft NDA provided to NOV included a signature line for Smart Reamer to be signed by "Jaime Barnardini." (Norway Writ, Annex 11, at 10.) Mr. Bernardini is Smart Reamer's vice president and was at the time, and still is, located in Houston, Texas.
- 34. The meeting that occurred on April 14, 2015, was very short in duration, and discussed little about Smart Reamer's technology or business. Rather, much of the meeting was filled by Mr. Rasheed boasting about patent lawsuits that he had either filed or was planning to file against Baker Hughes Incorporated and Schlumberger Inc. Any conversation that occurred concerning Smart Reamer's tool was very high level, with no discussion whatsoever of testing results, technology specifics, or how Smart Reamer's tool operated.
- 35. From NOV, the meeting on April 14, 2015, included Alastair Macfarlane and, remotely from Conroe, Texas, Russell Gilleylen and Greg Leuenberger.
- 36. Following the brief meeting on April 14, 2015, NOV determined that it was not interested in pursuing a relationship with Smart Reamer and no further contact was made between the two companies.

D. Smart Reamer Initiates Legal Actions Against NOV in United Kingdom

- 37. On August 24, 2017, without any prior notice, Smart Reamer issued proceedings against National Oilwell Varco Inc., National Oilwell Varco UK Limited, and NOV Downhole Eurasia Limited in the Intellectual Property Enterprise Court, United Kingdom ("UK Proceedings"). The Claim Form and the Particulars of Claim, as filed with the United Kingdom High Court of Justice, are attached hereto as Exhibit U and Exhibit V, respectively. National Oilwell Varco Inc., National Oilwell Varco UK Limited, and NOV Downhole Eurasia Limited are affiliates of NOV, and are referred to collectively herein as "NOV Affiliates in the UK Proceedings."
- 38. Smart Reamer alleged that the NOV Affiliates in the UK Proceedings infringe UK Patent No. 2465504 (the "UK '504 Patent") and UK Patent No. 2465505 (the "UK '505 Patent") through its making, promoting, using, offering and dealing in among others the following products ("NOV Accused Instrumentalities"):
 - a. "The Anderreamer with IQ Monitoring System;"
 - b. "IntelliServ Network;" and
 - c. "The Enhanced Measurement System (EMS) tools including those known as BlackBox / BlackStream / BlackBox Eclipse (the 'EMS Tools') and callipers intended for incorporation in a drillstring and/or Bottom Hole Assembly (BHA)."

(UK Particulars of Infringement, at 5.)

39. Smart Reamer's UK solicitors, Clarkslegal LLP, sent a copy of the documents filed in the UK Proceeding to the management of the NOV Affiliates in the UK Proceedings in a letter dated August 25, 2017. In the cover letter, a true and correct copy of which is attached hereto as Exhibit W, Smart Reamer's counsel indicated that Smart Reamer "wishes to provide

you with a period of time to consider the enclosed claim and decide whether or not you wish to pursue a settlement" with Smart Reamer.

40. The UK '504 Patent and the UK '505 Patent are both divided from UK Patent Application 0811815.0. The Patents-in-Suit all claim priority to UK Patent Application 0811815.0 and are all related to the patents asserted against the NOV Affiliates in the UK Proceeding.

E. Smart Reamer Will File Legal Action Against NOV on September 15, 2017

- 41. In a letter dated August 28, 2017, Smart Reamer's attorneys Arntzen de Besche Advokatfirma AS in Oslo, Norway, sent a draft writ alleging patent infringement and misappropriation of trade secrets and technical aids against National Oilwell Varco Norway as, National Oilwell Varco Inc., National Oilwell Varco UK Limited, and NOV Downhole Eurasia Limited. National Oilwell Varco Norway as, National Oilwell Varco Inc., National Oilwell Varco UK Limited, and NOV Downhole Eurasia Limited are affiliates of NOV and are referred to collectively herein as "NOV Affiliates in Norway Proceedings." A true and correct copy of the letter is attached as Exhibit X. and a true and correct copy of the draft writ enclosed with that letter (the "Norway Writ") is attached as Exhibit A hereto.
- 42. Specifically, Smart Reamer accuses the NOV Affiliates in the Norway Proceeding of infringing patent NO/EP 2 327 857 and patent application EP 2 746 527. *See* Norway Writ, at § 1.
- 43. Smart Reamer's draft writ alleges that certain of the NOV Accused Instrumentalities, in particular the IQ Monitoring System for the Anderreamer, infringes certain claims of patent NO/EP 2 327 857 and patent application EP 2 746 527.

- 44. Smart Reamer patent NO/EP 2 327 857 claims priority to UK Patent Application 0811815.0, like the patents asserted against NOV in the UK Proceeding, and like the Patents-in-Suit. All are related patents, addressing the same concepts and related or identical inventions.
- 45. In addition, Smart Reamer has accused NOV Affiliates in the Norway Proceeding of misappropriating certain alleged Smart Reamer trade secrets and technical aids. According to the draft writ, Smart Reamer alleges that such misappropriation occurred around a Lync weblink meeting between employees of NOV and Smart Reamer on April 14, 2015. NOV employees in the Houston, TX region attended that meeting via weblink from Texas. According to Smart Reamer's draft writ in the Norway Proceeding, NOV is continuing to make use of the alleged Smart Reamer trade secrets at least for pricing and strategy determinations (Norway Writ, at § 6.5), and has made use of alleged technical trade secrets at least as recently as August 31, 2016 (Norway Writ Annex 19, Exhibit 6 (Ex. Y).) Smart Reamer alleges that such use has occurred and continues to occur at least in Houston, Texas. (UK Particulars of Infringement (Ex. Z), at ¶10.)
- 46. The existence of actual foreign patent infringement actions and foreign misappropriation of trade secrets action against NOV Affiliate companies accusing an NOV tool of patent infringement has placed a cloud of uncertainty over NOV's business activities.
- 47. The allegations made in the actual and threatened foreign legal actions by Smart Reamer against NOV implicate and rely on events that occurred within the United States generally and, more specifically, in and around Houston, Texas.

FIRST CAUSE OF ACTION

Declaratory Judgment of No Theft of Trade Secrets under the Defend Trade Secrets Act 18 U.S.C. §§ 1831, et seq.

- 48. NOV repeats and incorporates by reference each and every allegation contained in the preceding paragraphs.
- 49. Smart Reamer has accused NOV of misappropriating its alleged trade secret information in a draft complaint it has threatened it will file in Norway on or about September 15, 2017.
- 50. There presently exists a real and actual controversy between NOV on the one hand and Smart Reamer and Wajid Rasheed on the other hand regarding whether NOV: (a) Smart Reamer and/or Wajid Rasheed provided NOV with any trade secret information; and (b) NOV misappropriated any such alleged trade secret information.
- 51. NOV maintains that it has not misappropriated any Smart Reamer trade secret or other confidential information. More specifically, NOV maintains that: (a) NOV specifically instructed Smart Reamer and Wajid Rasheed that they should not provide NOV with any non-public information; (b) Smart Reamer and Wajid Rasheed agreed that NOV would not be provided with any non-public information; (c) no information that Smart Reamer or Wajid Rasheed provided NOV was trade secret information; and (d) at no time did NOV misuse any information that it was provided by Smart Reamer or Wajid Rasheed.
- 52. The facts alleged, under all circumstances, show that there is a substantial controversy between NOV and Smart Reamer having adverse legal interests of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

53. Pursuant to 28 U.S.C. §§ 2201 and 2202, a declaratory judgment is necessary to confirm that NOV has not misappropriated any trade secret of Smart Reamer or Wajid Rasheed in violation of the Defend Trade Secrets Act, 18 U.S.C. §§ 1831, *et seq*.

SECOND CAUSE OF ACTION Declaratory Judgment of Non-Infringement of U.S. Patent No. 8,235,144 35 U.S.C. §§ 1, et seq.

- 54. NOV repeats and incorporates by reference each and every allegation contained in the preceding paragraphs.
- 55. The '144 Patent contains 21 claims including independent claims 1, 8, 11, 15, 17, and 18. Claims 2–7 depend, directly or indirectly, from claim 1 and incorporate all of the limitations of claim 1. Claims 9 and 10 depend directly from claim 8 and incorporate all of the limitations of claim 8. Claims 12–14 depend, directly or indirectly, from claim 11 and incorporate all of the limitations of claim 11. Claim 16 depends directly from claim 15 and incorporates all of the limitations of claim 15. Claims 19–21 depend, directly or indirectly, from claim 18 and incorporate all of the limitations of claim 18.
- 56. The NOV Accused Instrumentality does not infringe any claim of the '144 Patent.

 Among other things:
 - a. The NOV Accused Instrumentality does not include a "position sensor comprising a strip and sensor" and does not "optimize drilling dynamics by comparing position sensor data and vibration signal data" as required by claims 1–7 of the '144 Patent.
 - b. The NOV Accused Instrumentality does not include "a caliper element for measuring wellbore diameter; and data from the caliper is compared with data from the one or more sensing elements;" or "at least one expandable stabilizer block supported in a

second tool body, the at least one stabilizer block moveable from a retracted position substantially within the second tool body to an extended position radially outward from the second tool body to stabilize the apparatus in the wellbore" as required by claims 8–10 of the '114 Patent.

- c. The NOV Accused Instrumentality does not include the step of "measuring wellbore diameter with a caliper element" as required by claims 11–14 of the '144 Patent.
- d. The NOV Accused Instrumentality does not include "at least one expandable stabilizer block housed in a tool body, the at least one expandable stabilizer block, radially movable from a retracted position substantially within the body to an extended position radially outward from the body;" or "a caliper element for measures wellbore diameter; and data from the caliper element is compared with data from a vibration sensor and block positional data" as required by claims 15 and 16 of the '144 Patent.
- e. The NOV Accused Instrumentality does not include "the position sensor and the vibration sensor being in communication with a microprocessor to optimize drilling dynamics by comparing data" as required by claim 17 of the '144 Patent.
- f. The NOV Accused Instrumentality does not perform the step of "measuring wellbore diameter with a caliper element; wherein block positional data is compared with data from the vibration sensor and data from the caliper element to optimize drilling" as required by claims 18–21 of the '144 Patent.

- 57. The facts alleged, under all circumstances, show that there is a substantial controversy between NOV and Smart Reamer having adverse legal interests of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 58. Pursuant to 28 U.S.C. §§ 2201 and 2202, a declaratory judgment is necessary to confirm that NOV has not infringed and does not infringe, literally or under the doctrine of equivalents, either directly, indirectly, or willfully, any claim of the '144 Patent.

THIRD CAUSE OF ACTION Declaratory Judgment of Non-Infringement of U.S. Patent No. 8,511,404 35 U.S.C. §§ 1, et seq.

- 59. NOV repeats and incorporates by reference each and every allegation contained in the preceding paragraphs.
- 60. The '404 Patent contains 32 claims including independent claims 1, 20, 26, 28, 31, and 32. Claims 2–19 depend, directly or indirectly, from claim 1 and incorporate all of the limitations of claim 1. Claims 21–25 depend, directly or indirectly, from claim 20 and incorporate all of the limitations of claim 20. Claim 27 depends from claim 26 and incorporates all of the limitations of claim 26. Claims 29–30 depend from claim 28 and incorporate all of the limitations of claim 28.
- 61. The NOV Accused Instrumentality does not infringe any claim of the '404 Patent.

 Among other things:
 - a. The NOV Accused Instrumentality does not include "at least one calibration sensor to measure and detect changes in fluid properties, the at least one calibration sensor sensing fluid properties from one of a group comprising flow, rpm, weight, and hydraulic force;" as required by claims 1–19 of the '404 Patent.

- b. The NOV Accused Instrumentality does not include "sensing a fluid property from one of a group comprising flow, rpm, weight, density, sound transit time and hydraulic force using at least one calibration sensor" as required by claims 20–25 of the '404 Patent.
- c. The NOV Accused Instrumentality does not include "wellbore diameter measurement calipers to determine a wellbore diameter, the wellbore diameter measurement calipers incorporating fluid properties calibration sensors to calibrate said calipers;" "calibration sensors sensing fluid properties from one of a group comprising flow, rpm, density, sound transit time, weight, and hydraulic force, the wellbore diameter measurement calipers using said fluid properties calibration sensors and at least one telemetry system located at longitudinally separated positions each connected to a tool body;" or "at least one processor inter-connecting the wellbore diameter measurement calipers and the fluid properties calibration sensors, said processor providing verification and control of a desired wellbore diameter by comparing simultaneous measurements from the wellbore diameter measurement calipers and from the position sensor, and compensating the measurements using said fluid properties calibration sensors" as required by claims 26–27 of the '404 Patent.
- d. The NOV Accused Instrumentality does not operate in accordance with a method involving steps of "sensing a fluid property from one of a group comprising flow, rpm, density, sound transit time, weight, and hydraulic force using at least one calibration sensor;" "calibrating [an] acoustic caliper using a sensed fluid property from the at least one calibration sensor;" "using a processor, providing verification and control of the predetermined diameter by comparing and correlating data received from said acoustic

caliper and from the position sensor to deliver the predetermined diameter" and "comparing measured underreamed wellbore diameter with one or more of: calibration data, fluid properties, flow rate, underreamer cutter block position, weight and revolutions per minute to verify underreaming and delivery a desired wellbore diameter" as required by claim 28 of the '404 Patent.

- e. The NOV Accused Instrumentality does not operate in accordance with a method involving steps of "sensing a fluid property from one of a group comprising flow, rpm, density, sound transit time, weight, and hydraulic force using at least one calibration sensor;" "calibrating [an] acoustic caliper using a sensed fluid property from the at least one calibration sensor;" "using a processor, providing verification and control of the predetermined diameter by comparing and correlating data received from said acoustic caliper and from the position sensor to deliver the predetermined diameter;" and "comparing a measured underreamed wellbore diameter with one or more of: acoustic calibration data, fluid properties, flow rate, underreamer cutter block position, weight and revolutions per minute to verify underreaming and delivery of the predetermined diameter" as required by claim 31 of the '404 Patent.
- f. The NOV Accused Instrumentality does not operate in accordance with a method involving steps of "measuring a borehole diameter using at least one caliper;" "sensing a fluid property from one of a group comprising flow, rpm, density, sound transit time, weight, and hydraulic force using at least one calibration sensor;" "calibrating said caliper using a sensed fluid property from the calibration sensor" and "using a processor connected to a control area which act in response to data received from said at least one caliper, verifying and controlling a predetermined diameter by

comparing and correlating data received from the at least one caliper and from the position sensor to deliver the predetermined diameter" as required by claim 32 of the '404 Patent.

- 62. The facts alleged, under all circumstances, show that there is a substantial controversy between NOV and Smart Reamer having adverse legal interests of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 63. Pursuant to 28 U.S.C. §§ 2201 and 2202, a declaratory judgment is necessary to confirm that NOV has not infringed and does not infringe, literally or under the doctrine of equivalents, either directly, indirectly, or willfully, any claim of the '404 Patent.

FOURTH CAUSE OF ACTION Declaratory Judgment of Non-Infringement of U.S. Patent No. 8,528,668 35 U.S.C. §§ 1, et seq.

- 64. NOV repeats and incorporates by reference each and every allegation contained in the preceding paragraphs.
- 65. The '668 Patent contains 63 claims including independent claims 1, 23, 41, and 52. Claims 2–22 depend, directly or indirectly, from and incorporate all of the limitations of claim 1. Claims 24–40 depend, directly or indirectly, from and incorporate all of the limitations of claim 23. Claims 42–51 depend, directly or indirectly, from and incorporate all of the limitations of claim 41. Claims 53–63 depend, directly or indirectly, from and incorporate all of the limitations of claim 52.
- 66. The NOV Accused Instrumentality does not infringe any claim in the '668 Patent.

 Among other things:
 - a. The NOV Accused Instrumentality is not an "integrated expansion and calliper tool" and does not include "at least one calliper to measure wellbore diameter and

housed within a tool body, and a processor to receive caliper data, the at least one calliper and the processor being inter-linked to permit delivery of a predetermined wellbore diameter; wherein at least one positional sensor determines a position of the cutter block relative to the tool; and where measurements are processed by the processor that compares the measured wellbore diameter with a minimum programmed diameter and the cutter block position to verify correct operation of the tool" as required by claims 1–22 of the '668 Patent.

- b. The NOV Accused Instrumentality does not operate in accordance with a method involving steps of "locating [a] tool as recited in claim 1 [of the '668 Patent] in a borehole on a support below a restriction;" "measuring wellbore diameter by [a] caliper" and "using [a] processor to receive data from the at least one caliper, to compare the measured wellbore diameter with a cutter block position and the predetermined wellbore diameter, and selectively adjusting the position of the cutter block relative to the tool so as to achieve the predetermined wellbore diameter as required by claims 23–40 of the '668 Patent.
- c. The NOV Accused Instrumentality does not include "at least one caliper" or "an underreamer, and a processor in data reception contact with the calliper and in contact with a surface interface and [a] underreamer, wherein the processor controls the underreamer in response to the calliper measuring wellbore diameter by comparing a measured wellbore diameter using data from the at least one caliper with a cutter block position and a predetermined wellbore diameter, and activates or deactivates the underreamer in response to the caliper" as required by claims 41–51 of the '668 Patent.

- d. Accused Instrumentality does not operate in accordance with a method involving steps of "providing a calliper including at least one acoustic sensor for measuring wellbore diameter" or "providing a processor to control [a] cutter block position to underream the wellbore in response to the caliper by comparing a measured wellbore diameter with a cutter block position and a predetermined wellbore diameter" as required by claims 52–63 of the '668 Patent.
- 67. The facts alleged, under all circumstances, show that there is a substantial controversy between NOV and Smart Reamer having adverse legal interests of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 68. Pursuant to 28 U.S.C. §§ 2201 and 2202, a declaratory judgment is necessary to confirm that NOV has not infringed and does not infringe, literally or under the doctrine of equivalents, either directly, indirectly, or willfully, any claim of the '668 Patent.

FIFTH CAUSE OF ACTION Declaratory Judgment of Non-Infringement of U.S. Patent No. 9,447,676 35 U.S.C. §§ 1, et seq.

- 69. NOV repeats and incorporates by reference each and every allegation contained in the preceding paragraphs.
- 70. The '676 Patent includes nineteen claims including independent claims 1, 10, and 17. Claims 2–9 depend, directly or indirectly, from and incorporate all of the limitations of claim 1. Claims 11–16 depend, directly or indirectly, for and incorporate all of the limitations of claim 10. Claims 18 and 19 depend directly from and incorporate all of the limitations of claim 17.
- 71. The NOV Accused Instrumentality does not infringe any claim in the '676 Patent.

 Among other things:

- a. The NOV Accused Instrumentality does not operate in accordance with a method involving the steps of "sensing a relative position of extendable cutter blocks using a magnetic position sensor thereby providing extendable cutter block positional data" and the use of a processor that receives caliper data to "make[] a comparison between said calliper data, and said extendable cutter block positional data, wherein the processor sends an alert to a user in response to the comparison to check operational parameters in order to ensure that the borehole is accurately provided with [a] predetermined dimension, wherein a user is capable of making a user comparison between said caliper data, said extendable cutter block positional data, and said predetermined borehole dimension" as required by claims 1–9 of the '676 Patent.
- b. The NOV Accused Instrumentality does not operate in accordance with a method involving the steps of "measuring a reamed borehole diameter using [a] caliper"; and use of a processor that "makes a comparison between said measured reamed borehole diameter and the measured extendable block position [and] sends an alert to a user in response to the comparison to check operational parameters in order to control underreaming and deliver the desired borehole diameter, wherein a user is capable of making a user comparison between said caliper data, said extendable cutter block positional data, and said predetermined borehole dimension" as required by claims 10–16 of the '676 Patent.
- c. The NOV Accused Instrumentality does not operate in accordance with a method involving the steps of "providing a position sensor to measure an extendable cutter block position and a calliper to measure the reamed borehole diameter" and use of a processor that "makes a comparison between the measured extendable cutter block

position and the measured reamed borehole diameter and alerts a user in response to the comparison to check weight on the cutter blocks, torque on the cutter blocks, or a flow rate of fluid through the tool, wherein a user is capable of making a user comparison between said caliper data, said extendable cutter block positional data, and said predetermined borehole dimension" as required by claim 17 of the '676 Patent.

- 72. The facts alleged, under all circumstances, show that there is a substantial controversy between NOV and Smart Reamer having adverse legal interests of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 73. Pursuant to 28 U.S.C. §§ 2201 and 2202, a declaratory judgment is necessary to confirm that NOV has not infringed and does not infringe, literally or under the doctrine of equivalents, either directly, indirectly, or willfully, any claim of the '676 Patent.

SIXTH CAUSE OF ACTION Declaratory Judgment of Non-Infringement of U.S. Patent No. 9,593,538 35 U.S.C. §§ 1, et seq.

- 74. NOV repeats and incorporates by reference each and every allegation contained in the preceding paragraphs.
- 75. The '538 Patent contains twenty claims including independent claims 1 and 15. Claims 2–14 depend, directly or indirectly, from and incorporate all of the limitations of claim 1. Claims 16–20 depend, directly or indirectly, from and incorporate all of the limitations of claim 15.
- 76. The NOV Accused Instrumentality does not infringe any claim in the '538 Patent.

 Among other things:
 - a. The NOV accused instrumentality does not include a plurality of cutters "placed on an extendable cutter block in at least two substantially parallel substantially

helical rows, each substantially helical row having at least tour cutters, wherein at least three of the cutters on one of the substantially helical rows align with three of the cutters on the other of the substantially helical rows along the longitudinal axis to form at least three longitudinal rows of cutters extending along the longitudinal axis of the expandable reamer" as required by claims 1–14 of the '528 Patent.

- b. The NOV Accused Instrumentality does not include at least eight cutter elements "set in a substantially helical pattern on an extendable cutter block of an expandable reamer and wherein said pattern is repeated in at least two substantially parallel substantially helical rows, wherein each substantially helical row has at least four cutter elements, wherein at least three of the cutter elements on one of the substantially helical rows align with three of the cutter elements on the other of the substantially helical rows along the longitudinal axis to form at least three longitudinal rows of cutters extending along the longitudinal axis of the expandable reamer" as required by claims 15–20 of the '528 Patent.
- 77. The facts alleged, under all circumstances, show that there is a substantial controversy between NOV and Smart Reamer having adverse legal interests of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 78. Pursuant to 28 U.S.C. §§ 2201 and 2202, a declaratory judgment is necessary to confirm that NOV has not infringed and does not infringe, literally or under the doctrine of equivalents, either directly, indirectly, or willfully, any claim of the '538 Patent.

SEVENTH CAUSE OF ACTION Declaratory Judgment of Non-Infringement of U.S. Patent No. 9,677,342 35 U.S.C. §§ 1, et seq.

- 79. NOV repeats and incorporates by reference each and every allegation contained in the preceding paragraphs.
- 80. The '342 Patent contains eleven claims, consisting of independent claims 1 and 11, with claims 2–10 depending, either directly or indirectly, from and incorporating all of the limitations of claim 1.
- 81. The NOV Accused Instrumentality does not infringe any claim in the '342 Patent.

 Among other things:
 - a. The NOV Accused Instrumentality does not include an underreamer "provided with cutters forming a helical pattern, wherein the orientation of the helical pattern of the cutters is designed in response to outer end of the rows of cutting elements on the bit to align the cutters on the expandable underreamer with the cutting elements on the bit" as required by claims 1–10 of the '342 Patent.
 - b. The NOV accused instrumentality does not include an expandable underreamer having cutting elements "wherein an orientation of cutter elements on the expandable underreamer forms a helical pattern that is designed in response to outer ends of the rows of cutting elements on a bit to align the cutter elements on the expandable underreamer with the cutting elements on the bit" as required by claim 11 of the '342 Patent.
- 82. The facts alleged, under all circumstances, show that there is a substantial controversy between NOV and Smart Reamer having adverse legal interests of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

83. Pursuant to 28 U.S.C. §§ 2201 and 2202, a declaratory judgment is necessary to confirm that NOV has not infringed and does not infringe, literally or under the doctrine of equivalents, either directly, indirectly, or willfully, any claim of the '342 Patent.

DEMAND FOR JURY TRIAL

84. Pursuant to Rule 38 of the Federal Rules of Civil Procedure, NOV demands a trial by jury on all issues triable of right by a jury.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff NOV prays that the Court:

- a. declare that NOV has not misappropriated any trade secret information from Smart Reamer or Wajid Rasheed;
- b. declare that NOV has not infringed and does not infringe, literally or under the doctrine of equivalents, either directly, indirectly, or willfully, any claim of the Patents-in-Suit;
- c. declare this case an "exceptional case" within the meaning of 35 U.S.C. § 285 and award reasonable attorneys' fees to NOV; and
- d. award NOV such other costs and further relief as is just and proper.

DATED: September 13, 2017 Respectfully submitted,

SUTTON McAUGHAN DEAVER PLLC

By: s/Robert J. McAughan, Jr.

Robert J. McAughan, Jr.

Attorney-in-Charge
Tex. Bar No. 00786096
S.D. Tex. No. 16501
Jeffrey A. Andrews
Tex. Bar. No. 24050227
S.D. Tex. No. 608251
Three Riverway, Suite 900
Houston, Texas 77056
(713) 800-5700 (Telephone)
(713) 800-5699 (Facsimile)
bmcaughan@smd-iplaw.com
jandrews@smd-iplaw.com

Attorneys for Plaintiff